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OF THE SEVENTH AIR FORCE**

**SEVENTH AIR FORCE INSTRUCTION  
15-101**



**7 NOVEMBER 2012**

***Weather***

**WEATHER SUPPORT FOR  
SEVENTH AIR FORCE**

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This instruction implements Air Force Policy Directive (AFPD) 15-1, *Air Force Weather Operations*. This instruction defines the mission, organization, roles and responsibilities of Air Force Weather (AFW) organizations providing weather operations for Seventh Air Force (7 AF). It applies to all personnel assigned or attached to 7 AF and its associated units, as well as the 17th Operational Weather Squadron (17 OWS). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through Major Command (MAJCOM) publications/forms managers. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm>. “The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.”

***SUMMARY OF CHANGES***

This document has been substantially revised and should be reviewed in its entirety. Instruction title has been changed to Weather Operations. Changes in 7 AF organizational structure have been included. Weather watches and warnings for Co-located Operating Bases have been updated. Changes resulting from PACAFI 15-101, *Weather Support for PACAF*, have been incorporated.

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## Chapter 1

### GENERAL INFORMATION

**1.1. Purpose.** This document consolidates weather operational requirements and procedures for 7 AF armistice operations on the Korean peninsula. Weather support procedures for execution of Emergency War Orders (EWO) are covered in applicable Operations Plans (OPLANs). AFW organizations providing weather operations for 7 AF include the 607th Air Operations Center Weather Specialty Team (607 AOC/CODW), the 7th Air Force Forces (AFFOR) Staff Weather Officer, the 17th Operational Weather Squadron (17 OWS) at Joint Base Pearl Harbor-Hickam, and weather personnel at USAF Main Operating Bases (MOBs) and Co-located Operating Bases (COBs) in the Republic of Korea (ROK).

**1.2. Duty Priorities.** As required by AFMAN 15-129V2, *Air and Space Weather Operations Processes and Procedures*, Table 1.2, and as necessary to ensure AF requirements are met in order of urgency, 607 AOC/CODW provides prioritized weather operations to the AOC as follows:

1.2.1. Complete EWO Taskings.

1.2.2. Prepare and disseminate forecasts for special missions.

1.2.3. Provide routine and special request support to 7 AF/CC/CV, 607 AOC, 694th Intelligence Surveillance and Reconnaissance Group (ISRG), 7 AF/A4, 621st Air Control Squadron (ACS), Korea Reconnaissance Center (KRC), United States Forces Korea (USFK) Joint Personnel Recovery Center (JPRC), Detachment 1; Eighth Army (8A) Battlefield Coordination Detachment (BCD), and subordinate USAF-component weather teams.

1.2.4. Provide tropical weather updates.

1.2.5. Maintain online weather products.

1.2.6. Coordinate with Osan Weather Squadron for ROK Air Force (ROKAF) intra-theater forecasts.

1.2.7. Participate in Korean Theater of Operations (KTO)-wide meteorological coordination.

1.2.8. Conduct scheduled briefings.

1.2.9. Conduct special weather studies.

1.2.10. Conduct unscheduled briefings.

1.2.11. Weather Functional Training and Continuation Training.

1.2.12. Accomplish Administrative Tasks.

1.2.13. Perform miscellaneous duties.

### 1.3. Responsibilities.

1.3.1. 7 AF/A3OW. The 7 AF Staff Weather Officer is responsible for the planning and organization of weather operations for USAF missions, exercises and contingencies in the 7 AF Area of Responsibility (AOR). As the functional area manager, A3OW provides oversight of the 607 AOC/CODW, the 8th Operations Support Squadron, Operations Support

Weather Flight (8 OSS/OSW) at Kunsan AB, the 51st Operations Support Squadron, Operations Support Weather Flight (51 OSS/OSW) at Osan AB, as well as any weather personnel deployed into the AOR in support of Air Force operations.

1.3.2. 607 AOC/CODW. CODW provides timely and relevant operational weather support to HQ 7 AF, the 607 AOC (also known as the Korean Air Operations Center, (KAOC)), the non-7 AF units operating within the AOC such as USFK JPRC and 8A BCD Det 1, the Korea Combined Operational Intelligence Center (KCOIC), and USAF forces stationed at or deployed to the five COBs: Cheong-Ju AB, Gimhae AB, Gwang-Ju AB, Suwon AB, and Daegu AB.

1.3.3. 607 WS. The 607th Weather Squadron, headquartered at United States Army Garrison Yongsan, provides operational weather support to 8A installations. 607 WS also provides staff weather support to United Nations Command (UNC), Combined Forces Command (CFC), and USFK. The commander of the 607 WS is the Joint US Meteorological and Oceanographic (METOC) Officer for the KTO.

1.3.4. 8 OSS/OSW. The WF at Kunsan AB provides weather operations for that base.

1.3.5. 51 OSS/OSW. The WF at Osan AB provides weather operations for that base.

1.3.6. 17 OWS. The 17th Operational Weather Squadron at Joint Base Pearl Harbor-Hickam provides weather forecasts and data for the KTO as required by relevant AFMANs and support agreements. Specific weather requirements are outlined and coordinated as needed. 17 OWS ensures weather support is available 24 hours a day, seven days a week.

**1.4. Release of Weather Information.** Weather organizations under 7 AF do not provide weather support to the general public except as authorized by AFI, the 7 AF/CC or designated representative. Mutual support between 7 AF and ROKAF weather forces is authorized when performing common missions or in combined exercises or contingencies provided all data is unclassified or at "Secret Releasable to US/ROK" level.

## Chapter 2

### FORECASTING SERVICES

**2.1. Duty Hours.** The 607 AOC/CODW provides limited forecast services from 0400 until 1700 on weekdays unless otherwise directed.

**2.2. Terminal Aerodrome Forecast (TAF).**

2.2.1. TAFs for 7 AF locations are issued by the 17 OWS.

2.2.2. TAFs for MOBs are issued by 17 OWS IAW Installation Data Pages (IDPs) between the 17 OWS and the 8 OSS and 51 OSS.

2.2.3. When USAF assets deploy to COBs, the 7 AF Staff Weather Officer will coordinate with the 17 OWS for TAF support if required. Deploying units will refer to the appropriate In-Garrison Expeditionary Support Plan (IGESP) for information.

2.2.4. TAFs are issued IAW AFMAN 15-124, *Meteorological Codes*, using specification and amendment criteria as designated in AFMAN 15-129V1 and the 7AF IDP, unless deviations are required for local mission requirements as documented in weather support documents or in Support Assistance Requests (SARs).

**2.3. Operations and Intelligence Brief.**

2.3.1. The Ops-Intel weather brief is produced by the 607 AOC/CODW by 0600 hours each duty day. The brief assists decision makers in maintaining situational awareness of weather impacts that may impact 7 AF mission execution.

2.3.2. It is updated when operationally significant weather is anticipated.

2.3.3. The brief is made available on Secure Internet Protocol Network (SIPR) at the 7 AF website <http://www.kaoc.osan.af.smil.mil/7af.htm>. It is also available during combined operations on the Community of Interest Network (COIN) at the Air Component Command Portal, <http://accportal.kaoc.osan.korea.smil.mil>, select “Special Staff”, then “Weather.”

**2.4. Sensitive Reconnaissance Observation (SRO) Brief.** When SRO assets are flying in or near the Korea Air Defense Identification Zone (KADIZ), 607 AOC/CODW assists KRC, KAOC, and 7 AF senior leadership maintain situational awareness of weather impacts to these missions.

**2.5. Pilot-to-Metro Service (PMSV).** The 607 AOC/CODW cannot provide PMSV. PMSV is available from the 8 OSS/OSW, 51 OSS/OSW, and 607 WS DET 2 on UHF 346.5 MHZ.

**2.6. Situational Awareness Meteorological Watch (METWATCH).**

2.6.1. The 607 AOC/CODW monitors and reports on observed and forecast conditions across the KTO to provide situational awareness of weather impacts to 7 AF mission execution.

2.6.2. Upon request, CODW can provide planning forecasts for travel itineraries. Such forecasts are not to be used as flight weather briefs.

**2.7. Tropical Weather Support.** Tropical support is outlined in Chapter 7.

**2.8. Severe Weather Action Plan (SWAP).** The SWAP exists to assist forecasters during severe weather outbreaks or the threat of severe weather. Determining the probability and severity of anticipated severe weather events is an essential part of the Operational Risk Management (ORM) process to evaluate and determine proper courses of action.

2.8.1. Severe weather planning and response is completed by the 8 OSS/OSW for Kunsan AB and by the 51 OSS/OSW for Osan AB. 607 AOC/CODW serves an advisory and situational awareness role for 7 AF leadership during these events.

2.8.2. COBs are notified of severe weather by the 17 OWS via phone or email contact and the issuing of watches or warnings as detailed in Attachment 2.

2.8.3. 607 AOC/CODW is not manned to provide active monitoring of severe weather for COBs.

2.8.4. 7 AF/A3OW will relay Operations Report (OPREP) 3, completed IAW AFI 10-206, *Operational Reporting* and AFI 10-229, *Responding to Severe Weather Events*, to the 17 OWS and the Pacific Air Forces Director of Weather, PACAF/A3OW via the 51 FW/CP, for damage occurring from any of the following phenomena:

2.8.4.1. Winds 50 knots or greater (to include gusts)

2.8.4.2. Hail 3/4 inch or larger

2.8.4.3. Tornadoes

2.8.4.4. Lightning strikes

2.8.4.5. Snowfall greater than 12 inches in 24 hours.

**2.9. Other Services.** The following services can be provided upon request:

2.9.1. Investigation Boards. A qualified weather officer/forecaster serves as the weather member of investigation boards upon appointment by HQ PACAF or 7 AF/CC.

2.9.2. Consultation Services. 7 AF/A3OW can provide advice concerning weather support problems or requirements; and provide input on weather annexes or appendices to operations orders/plans, pre-deployment orders and deployment orders, as required to ensure weather support requirements for HQ 7 AF are accurately documented.

2.9.3. Climatological Services. 607 AOC/CODW can provide tailored climatology support on an as needed basis upon request.

2.9.4. Weather Web Pages. A tailored web page maintained by 17 OWS for PACAF weather is available at <https://17ows.hickam.af.mil>.

2.9.5. Exercise support. Provided as requested.

## Chapter 3

### OBSERVING SERVICES

#### 3.1. Concept of Operations (CONOPs).

3.1.1. 607 AOC/CODW does not generate weather observations.

3.1.2. Weather observations for Kunsan AB and Osan AB are provided for by the 8 OSS/OSW and 51 OSS/OSW respectively, as addressed in their respective weather support documents.

3.1.3. Observing services at activated COBs are provided by deployed weather flights IAW AFMAN 15-111, *Surface Weather Observations*, the governing IGESP, and Letters of Instruction (LOI) from the 7 AF Senior Weather Officer (7 AF/A3OW) and/or the Joint METOC Officer (607 WS/CC).

#### 3.2. Primary Observation Equipment.

3.2.1. Both Kunsan AB and Osan AB use the AN/FMQ-19 Automatic Meteorological Station to generate surface observations. 8 OSS/OSW and 51 OSS/OSW forecasters augment AN/FMQ-19 observations IAW AFMAN 15-111.

3.2.2. Units deploying to the Korean peninsula are advised that fixed-base USAF weather observation equipment is not available at COBs. Weather personnel will deploy with and operate deployable weather observation equipment. The TMQ-53 is the preferred solution. Upon request, the 17 OWS will support TAFs, Watches, Warnings, and Advisories (WWA) for COBs.



## Chapter 4

### WEATHER WATCHES, WARNINGS AND ADVISORIES

**4.1. General Information.** Weather WWA are issued IAW AFMAN 15-129V1 to protect vital resources from hazardous conditions and to provide maximum flight safety. Each watch, warning or advisory is assigned a number following the two-digit number of the current month (e.g. 06-001 would be the first watch/warning/advisory issued in June). Multiple watches may be in effect at any given time, however only one warning will be effect at one time for a given location, excluding lightning watches/warnings. Although only one warning may be in effect at one time for a given location, they may include multiple criteria (e.g. severe winds, runway crosswinds and thunderstorms). Multiple advisories may be in effect at the same time for a location.

#### **4.2. WWA Responsibilities.**

4.2.1. The 607 AOC/CODW does not generate WWAs. 607 AOC/CODW does maintain situational awareness of WWAs for MOBs and COBs and relays significant information to 7 AF leadership.

4.2.2. The 51 OSS/OSW and 17 OWS have dual responsibility for Osan AB WWAs IAW the 17 OWS – 51 OSS IDP.

4.2.3. The 8 OSS/OSW and 17 OWS have dual responsibility for Kunsan AB WWAs IAW the 17 OWS – 8 OSS IDP.

4.2.4. WWA responsibilities for COBs during armistice are coordinated with 17 OWS by 7 AF/A3OW and 607 AOC/CODW as captured in the 7 AF Installation Data Page. These WWA criteria and impacts are outlined in Attachment 2.

4.2.5. Deploying forces will coordinate WWA requirements with the 17 OWS through the 7 AF/A3OW and 607 AOC/CODW. WWA criteria and lead times are determined by mission requirements.

#### **4.3. WWA Dissemination.**

4.3.1. Occurs as outlined below and in Attachment 2, figure A2.1.

4.3.2. The 17 OWS disseminates all KTO WWAs by phone or email and posts the WWA onto the following websites for all MOBs and COBs: Non-secure Internet Protocol Router (NIPR), <https://17ows.hickam.af.mil>; SIPR, <http://17ows.hickam.af.smil.mil>; and COIN/CENTRIXS-Korea, <https://17ows.af.kor.cmil.mil>.

4.3.3. The 17 OWS disseminates WWA for COBs as outlined in Attachment 2.

4.3.4. The 17 OWS disseminates Area Weather Advisories (AWA) for the KTO as outlined in USFKR 115-1, USFK Area Weather Advisories and Tropical Cyclone Procedures for the Republic of Korea. Criteria for AWAs is coordinated and outlined by the support agreement between the 607 WS and 17 OWS. Attachment 2 contains a map outlining the areas and a list of AWA criteria and impacts.

4.3.5. The Joint Typhoon Warning Center (JTWC) provides the official DOD forecast for tropical systems for the KTO. Procedures for tropical support and warning dissemination are outlined in PACAFI 15-101. Further information is available in Chapter 7.

## Chapter 5

### RECIPROCAL SUPPORT AGREEMENTS

#### **5.1. 607 AOC/CODW.** The Weather Specialty Team will:

- 5.1.1. Provide specialized briefings during armistice, exercises, contingencies, special missions and EWO.
- 5.1.2. Provide climatology data for long range planning.
- 5.1.3. Provide specialized products to include Tactical Decision Aids (TDAs).
- 5.1.4. Provide solar/lunar data.
- 5.1.5. Coordinate with ISRD and KRC for the generation of the USFK 48-hour Cloud Free Line of Sight (CFLOS) forecast produced by the 17 OWS.
- 5.1.6. Provide COD with situational awareness of weather impacts to 7 AF operations. This will be done prior to the start of local flying or beginning of a shift.
- 5.1.7. Provide 621 ACS air controllers with weather support to maintain command and control (C2) and situational awareness during normal 607 AOC/CODW duty hours. This includes current and forecast weather for the KTO, ranges, primary bases and divert bases.
- 5.1.8. Provide 621 ACS with weather support outside of 607 AOC/CODW duty hours by coordinating support from the 8 OSS/OSW, 51OSS/OSW and 17 OWS.
- 5.1.9. Respond to JPRC weather requests promptly, any time of day, to support Personnel Recovery (PR) efforts.

#### **5.2. 607 AOC/SRD (Strategy Division), CPD (Combat Plans Division), AMD (Air Mobility Division) and JPRC.** These organizations will:

- 5.2.1. Provide requirements for weather support and weather impact thresholds to 607 AOC/CODW. Thresholds are identified in Attachment 3.
- 5.2.2. Provide feedback on weather support.

#### **5.3. 607 AOC/COD.** COD will:

- 5.3.1. Provide requirements for weather support and weather impact thresholds to 607 AOC/CODW. Thresholds are identified in Attachment 3.
- 5.3.2. Provide feedback on weather support.
- 5.3.3. Have airspace management provide 607 AOC/CODW with a summary of the next day's missions and the daily planning schedule.
- 5.3.4. Provide a seat for weather personnel on the combat operations floor.
- 5.3.5. Provide Non-secure Internet Protocol Router Network (NIPRNET), COIN and SIPR connectivity.

**5.4. 607 AOC/ISR and KRC.** These organizations will:

- 5.4.1. Provide requirements for weather support and weather impacts thresholds to 607 AOC/CODW. Thresholds are identified in Attachment 3.
- 5.4.2. Provide feedback on weather support.
- 5.4.3. Provide feedback whenever CFLOS forecasts impact mission execution.

**5.5. 621 ACS.** The ACS will:

- 5.5.1. Provide requirements for weather support and weather impact thresholds for current missions to 607 AOC/CODW. Thresholds are identified in Attachment 3.
- 5.5.2. Request Pilot Weather Reports (PIREPs) from each aircraft contact as weather dictates and pass PIREPS to the Supervisor of Flying (SOF) on duty.

**5.6. 7 AF & 17 OWS.**

5.6.1. 607 AOC/CODW will:

- 5.6.1.1. Coordinate weather requirements for both the 607 AOC and COBs at least 72 hours prior to the operational start date.
- 5.6.1.2. Provide feedback on weather support.

5.6.2. The 17 OWS will:

- 5.6.2.1. Provide WWA and TAF support to COBs.
- 5.6.2.2. Provide 5-day forecasts for Osan AB, Kunsan AB, Gimhae AB, Gwang-ju AB and Daegu AB IAW AFMAN 15-129V1.
- 5.6.2.3. Maintain a webpage and products specifically dedicated to support 7 AF on NIPRNET, SIPR and COIN/CENTRIXS-Korea.
- 5.6.2.4. Include the COD Ops Watch on all ROK WWA dissemination lists.

## Chapter 6

### DISSEMINATION OF WEATHER INFORMATION

**6.1. General Information.** Assured communications are crucial to the dissemination of weather information. Weather personnel must ensure timely and proper notifications.

**6.2. Dissemination of Weather Data.**

6.2.1. SIPR. The 607 AOC/CODW disseminates weather information primarily via the SIPR website at <http://www.kaoc.osan.af.smil.mil/7af.htm>.

6.2.2. NIPR. The 7 AF weather webpage at <https://17ows.hickam.af.mil> (select “Korea”) provides real-time environmental situational awareness for command and control decisions.

6.2.3. COIN. During exercises and contingencies, the primary method of weather dissemination is via the Air Component Command (ACC) Portal on COIN at <http://accportal.kaoc.korea.smil.mil>. This site is also accessible on the CENTRIXS-Korea network.

6.2.4. Phones. 607 AOC/CODW has access to Secure Terminal Equipment (STE)s , SIPR Voice over Internet Protocol (VOIP), CENTRIXS VOIP , and a red switch phone for secure communications. Call DSN 784-6372 or 6350 for details.

6.2.5. Personnel requiring weather information without access to these websites should contact the weather team at the phone numbers listed above.

6.2.6. Osan AB and Kunsan AB use the Joint Environmental Toolkit (JET) system for local and long-distance dissemination of weather data. Contact the 8 OSS/OSW or 51 OSS/OSW for additional information.

6.2.7. COBs receive notification of weather parameters IAW their mission requirements directly from the 17 OWS; see Attachment 2, Table A2.2.. In addition, the 17 OWS posts all weather watch, warning, and advisories on their website at <https://17ows.hickam.af.mil> (select “Korea”).

6.2.8. Weather units deploying to the Korean peninsula, in support of Air Force operations, must coordinate data dissemination procedures through 7 AF/A3OW and 607 AOC/CODW.

## Chapter 7

### TROPICAL CYCLONE SUPPORT

**7.1. General Information.** Specific support procedures are IAW USPACOMINST 0539.1, *Tropical Cyclone Operations*; PACAFI 15-101, USFKR 115-1, and local Standing Operating Procedures (SOPs).

**7.2. USFK Tropical Cyclone Condition of Readiness (TCCOR) Postures and Definitions.** The TCCOR authority for the Korean peninsula is CDR USFK, delegated to USFK J3. TCCORs are issued and disseminated by Command Center Seoul. Tables 7.1 and 7.2 define TCCORs and meteorological terminology associated with tropical cyclones.

**Table 7.1. USFK**

CONDITION	DEFINITION
TCCOR 4	Winds $\geq$ 50 kts (58 MPH) are forecasted to occur within 72 hours
TCCOR 3	Winds $\geq$ 50 kts (58 MPH) are forecasted to occur within 48 hours
TCCOR 2	Winds $\geq$ 50 kts (58 MPH) are forecasted to occur within 24 hours
TCCOR 1	Winds $\geq$ 50 kts (58 MPH) are occurring or are forecasted to occur within 12 hours

**Table 7.2. Delineation of Tropical Cyclones Based on Wind Speed**

TERM	DEFINITION
Tropical Depression	Tropical cyclone with maximum sustained winds of 25-34 kts
Tropical Storm	Tropical cyclone with maximum sustained winds of 34 to 63 kts
Typhoon	Tropical cyclone with maximum sustained winds of 64 to 129 kts
Super Typhoon	Tropical cyclone with maximum sustained winds of 130 kts or greater

**7.3. Tropical Cyclone Responsibilities.** Specific responsibilities are as follows:

7.3.1. JTWC at Joint Base Pearl Harbor-Hickam, Hawaii issues the official DOD tropical cyclone track and intensity forecast for the Pacific and Indian Oceans. Warnings and bulletins are normally issued every six hours, and are available via the CAC-restricted NIPR address <http://www.usno.navy.mil/JTWC>. These products typically include position and intensity forecasts out to 120 hours, unless dissipation or extra-tropical transition is predicted to occur earlier.

7.3.2. 607 WS coordinates with USFK J-3 to recommend TCCORs for the ROK. TCCORs are based on the latest JTWC tropical cyclone bulletin and input from 17 OWS forecasters. TCCORs are issued based on USFK Areas (outlined in map at Attachment 2, Figure A2.2). 607 WS Typhoon Duty Officer prepares and disseminates TCCOR messages to the USFK CC-Seoul Emergency Operations Center, who then distributes via command and control systems. Table 7.3 summarizes which USFK Areas MOBs and COBs are in.

**Table 7.3. USFK Areas corresponding to MOBs and COBs**

<b>Location</b>	<b>USFK Area</b>
Kunsan AB	4
Osan AB	3
Cheong-Ju AB	3
Gwang-Ju AB	4
Gimhae AB	4
Suwon AB	3
Daegu AB	4

7.3.3. 607 AOC/CODW will:

7.3.3.1. Closely monitor all tropical storms which may impact 7 AF assets or missions or threaten the Republic of Korea.

7.3.3.2. Keep key leadership informed regarding potential impacts from the storm.

7.3.3.3. Notify 7 AF staff via e-mail message or via in-person brief, as necessary, when a tropical cyclone is forecast to affect the Korean peninsula and/or be within 300 nm of the peninsula within 72 hours. Disseminate briefing to the “7 AF Directors/Commanders” email list. Post tropical storm updates to the 7 AF SIPR website, <http://www.kaoc.osan.af.smil.mil/7af.htm>.

7.3.3.4. At TCCOR 3, 607 AOC/CODW elevates it’s monitoring of the storm to include 24-hour phone stand-by. At TCCOR 2, 607 AOC/CODW maintains Severe Weather Action Team (SWAT) monitoring of the forecasts with frequent briefs to 7 AF Operations Watch to update 7 AF leadership.

**Note:** Tropical cyclone forecasts beyond 72 hours have high degrees of uncertainty and are subject to change.

7.3.3.5. Notify 7 AF staff as appropriate when tropical cyclones are forecast to affect other U.S. Pacific Command resources, to include Japan, Okinawa and Guam.

7.3.3.6. Accomplish additional support procedures in accordance with USPACOMINST 0539.1 and PACAFI 15-101.

## Chapter 8

### SPACE WEATHER SUPPORT AND SERVICE

**8.1. General Information.** The 607 AOC/CODW coordinates with 607 AOC/CPDA (Space Operations Officer) to provide space weather support and services to 7 AF and the KAO. The nature of the space environment should be a planning factor for agencies dealing with satellite communications, High Frequency (HF) point-to-point communications, or ground-based radars. Coordinate specific requirements for support with 607 AOC/CODW and 607 AOC/CPDA. The space weather page on the Joint Army-Air Force Weather Information Network (JAAWIN), <https://weather.afwa.af.mil>, is the primary source for space weather information until 01 Oct 12. After this date, space weather will be available on Air Force Weather – Web Services (AFW-WEBS), <https://weather.af.mil>.



## Chapter 9

### BACKUP AND EVACUATION OPERATIONS

**9.1. General Information.** During communication outages and work center evacuation, 607 AOC/CODW will continue to provide tailored weather support as outlined in this document.

**9.2. Communication Outages.** If e-mail and internet communications are non-operable, 607 AOC/CODW will disseminate mission-critical data by other means (i.e. fax or phone).

**9.3. Power Outages.** During power outages at building 935, a generator provides backup power to the building. The building custodian is the 607 AOC Facility Management Office (FMO).

**9.4. Alternate Operating Location.** In the event Building 935 must be evacuated, 607 AOC/CODW operates from the following locations in order of priority:

9.4.1. Location designated by the KAO director or Chief of Combat Operations.

9.4.2. 51 OSS/OSW WF office (784-6332/9370)

**9.5. Services Provided.** All support according to this document will be provided during backup and evacuation. 17 OWS continues to provide weather support to 607 AOC/CODW as outlined in this document and according to the IDP between 17 OWS and 7 AF.

**9.6. Catastrophic Failure.** In the event 607 AOC/CODW personnel are no longer able to provide support to 7 AF agencies, 17 OWS will assume all 607 AOC weather support responsibilities as documented in AFMAN 15-129V1, the IDP between 17 OWS and 7 AF, and this instruction.

JAN-MARC JOUAS, Lt General, USAF  
Commander

**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 15-1, *Air Force Weather Operations*, 19 February 2010  
AFI 10-206, *Operational Reporting*, 6 September 2011  
AFI 10-229, *Responding to Severe Weather Events*, 15 October 2003  
AFMAN 15-111, *Surface Weather Observations*, 10 March 2009  
AFMAN 15-124, *Meteorological Codes*, 28 October 2009  
AFMAN 15-129V1, *Air and Space Weather Operations - Characterization*, 6 December 2011  
AFMAN 15-129V2, *Air and Space Weather Operations – Exploitation*, 7 December 2011  
AFMAN 33-363, *Management of Records*, 1 March 2008  
PACAFI 15-101, *Weather Support for PACAF*, 15 June 2009  
USFKR 115-1, *USFK Area Weather Advisories and Tropical Cyclone Procedures for the Republic of Korea*, 13 February 2007  
USPACOMINST 0539.1, *Tropical Cyclone Operations*, 28 October 2006

***Adopted Forms***

AF Form 847, *Recommendation for Change of Publication*, 22 September 2009

***Abbreviations and Acronyms***

**7AF**—Seventh Air Force  
**ACC**—Air Component Command  
**ACS**—Air Control Squadron  
**AFFOR**—Air Force Forces  
**AFMAN**—Air Force Manual  
**AFRIMS**—Air Force Records Information Management System  
**AFW**—Air Force Weather  
**AMD**—Air Mobility Division  
**AOR**—Area of Responsibility  
**AWA**—Area Weather Advisories  
**BCD**—Battlefield Coordination Detachment  
**CFC**—Combined Forces Command  
**CFLOS**—Cloud Free Line of Sight  
**COB**—Co-located Operating Base

**COD**—Combat Operations Division  
**COIN**—Community of Interest Network  
**CONOPS**— Concept of Operations  
**CPD**— Combat Plans Division  
**8A**—Eighth Army  
**EWO**—Emergency War Orders  
**FMO**—Facility Management Office  
**HF**—High Frequency  
**IDP**—Installation Data Page  
**IGESP**—In-Garrison Expeditionary Support Plan  
**ISR**D—Intelligence, Surveillance, and Reconnaissance Division  
**JAAWIN**—Joint Army Air Force Weather Information Network  
**JET**—Joint Environmental Toolkit  
**JPRC**—Joint Personnel Recovery Center  
**JTWC**— Joint Typhoon Warning Center  
**KADIZ**— Korea Air Defense Identification Zone  
**KAOC**— Korean Air Operations Center  
**KCOIC**— Korea Combined Operational Intelligence Center  
**KRC**—Korea Reconnaissance Center  
**KTO**—Korean Theater of Operations  
**LOI**—Letter of Instruction.  
**MAJCOM**—Major Command  
**METOC**— Meteorological and Oceanographic  
**METWATCH**—Meteorological Watch  
**MOB**—Main Operating Base  
**NIPRNET**—Non-secure Internet Protocol Router Network  
**OPLAN**—Operation Plan  
**OPR**—Office of Primary Responsibility  
**OPREP**— Operations Report  
**ORM**— Operational Risk Management  
**OSS**— Operations Support Squadron  
**OSW**— Operational Support Weather

**OWS**—Operational Weather Squadron  
**PIREP**—Pilot Weather Report  
**PMSV**—Pilot-to-Metro Service  
**PR**—Personnel Recovery  
**RDS**—Records Disposition Schedule  
**ROK**—Republic of Korea  
**ROKAF**—ROK Air Force  
**SAR**—Support Assistance Request  
**SIPR**—Secure Internet Protocol Network  
**SOF**—Supervisor of Flying  
**SOP**—Standing Operating Procedure  
**SRD**—Strategy Division  
**SRO**—Sensitive Reconnaissance Observation  
**STE**—Secure Terminal Equipment  
**SWAT**—Severe Weather Action Team  
**SWAP**—Severe Weather Action Plan  
**TAF**—Terminal Aerodrome Forecast  
**TCCOR**—Tropical Cyclone Condition of Readiness  
**TDA**—Tactical Decision Aid  
**UNC**—United Nations Command  
**USFK**—United States Forces Korea  
**USPACOMINST**—U.S. Pacific Command Instruction  
**VOIP**—Voice Over Internet Protocol  
**WF**—Weather Flight  
**WWA**—Watches, Warnings, and Advisories

### *Terms*

**METWATCH**—Monitoring aerospace weather for a route, area, or terminal and advising concerned organizations when phenomena that could effect their operations or pose a hazard to life or property are observed or about to occur.

**Operation Plan (OPLAN)**—A plan for one or more operations that deployed units carry out simultaneously or in a series of connected stages. Headquarters issue OPLANs as directives based on stated assumptions to allow subordinate officers to prepare supporting plans and orders.

**Operational Weather Squadron (OWS)**—An organization comprised of management, technician, and training personnel responsible for providing operational-level weather forecast

products and services to customers within their AOR. The 17 OWS serves the USPACOM AOR, which includes the Korean peninsula.

**Pilot Report**—A report of in-flight weather provided by an aircrew member.

***Terminal Aerodrome Forecast—(TAF). A weather forecast for a certain aerodrome, limited to within 5 nm of the airfield. The format is highly structured IAW AFMAN 15-124.***

**Weather Advisory (WA)**—A special notice provided to a supported agency when an established weather condition that could effect its operation is occurring or is expected to occur.

**Weather Flight (WF)**—A term covering any military weather organization providing direct operational support at the tactical level.

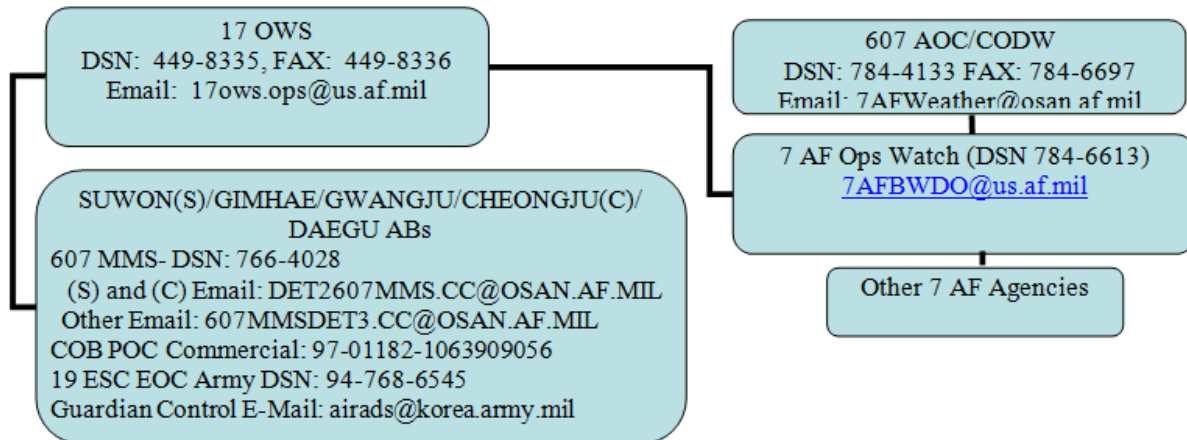
**Weather Watch**—A special notice provided to supported customers that alert them of a potential for weather conditions of such intensity as to pose a hazard to life or property for which the customer must take protective action.

## Attachment 2

**WEATHER WATCH, WARNING, ADVISORY AND AREA WEATHER ADVISORY INFORMATION**

**A2.1. General.** The following figures and tables outline the details of weather watches, warning and advisories issued for MOBs and COBs, as well as the USFK AWAs.

**Figure A2.1. Notification Flow Chart**



**Figure A2.2. COBs Receiving Weather Watches and Warnings from the 17 OWS**



**Table A2.1. Weather Watches for COBs During Armistice**

<b>WATCH CRITERIA</b>			
<b>PHENOMENA</b>	<b>DLT (in minutes)</b>	<b>Mission Impacts</b>	<b>ISSUED BY</b>
Tornado	As potential warrants	Immediate threat of catastrophic damage to personnel and property	17 OWS
Severe Thunderstorm (Damaging Winds GTE 45 knots and/or Hail GTE 1/2 in)	As potential warrants	Immediate threat to exposed personnel, facilities & equipment	17 OWS
Damaging Winds GTE 45 knots	As potential warrants	Immediate threat to exposed personnel, facilities & equipment	17 OWS
Freezing Precipitation	As potential warrants	Range of impacts dependent on type & intensity	17 OWS
Heavy Rain/Snow Accumulation GTE 2" in 12 hours	As potential warrants	Disrupts personnel movement or flight line activities	17 OWS
Lightning within 5 NM	30	Immediate threat to exposed personnel	17 OWS

**Table A2.2. Weather Warnings for COBs During Armistice**

<b>FORECAST/OBSERVED WEATHER WARNING CRITERIA</b>			
<b>PHENOMENA</b>	<b>DLT (in minutes)</b>	<b>Mission Impacts</b>	<b>ISSUED BY</b>
Tornado	90	Immediate threat of catastrophic damage to personnel and property	17 OWS
Severe Thunderstorm (Damaging Winds GTE 45 knots and/or Hail GTE 1/2 in)	120	Immediate threat to exposed personnel, facilities & equipment	17 OWS
Damaging Winds GTE 45 knots	120	Immediate threat to exposed personnel, facilities & equipment	17 OWS
Freezing Precipitation	120	Range of impacts dependent on type & intensity	17 OWS
Heavy Rain/Snow Accumulation GTE 2" in 12 hours	90	Disrupts personnel movement or flight line activities	17 OWS
Lightning within 5 NM	Observed	Immediate threat to exposed personnel	17 OWS

Table A2.3. Weather Watches for COBs During Major Exercises and Contingencies

WATCH CRITERIA			
PHENOMENA	DLT (in minutes)	Mission Impacts	ISSUED BY
Tornado	As potential warrants	Immediate threat of catastrophic damage to personnel and property	17 OWS
Severe Thunderstorm (Damaging Winds GTE 45 knots and/or Hail GTE 1/2 in)	As potential warrants	Immediate threat to exposed personnel, facilities & equipment	17 OWS
Moderate Thunderstorm (Damaging Wind GTE 35 kts and/or Large Hail GTE 1/4" LT 3/4 in.)	As potential warrants	Increased risk to exposed personnel, property, acft & vehicles.	17 OWS
Damaging Winds GTE 45 knots	As potential warrants	Immediate threat to exposed personnel, facilities & equipment	17 OWS
Strong Winds GTE 35 knots	As potential warrants	Increased risk to exposed personnel, property, acft & vehicles.	17 OWS
Freezing Precipitation	As potential warrants	Range of impacts dependent on type & intensity	17 OWS
Heavy Rain/Snow Accumulation GTE 2" in 12 hours	As potential warrants	Disrupts personnel movement or flight line activities	17 OWS
Blizzard Conditions (Duration GTE 3 hrs, wind or gusts GTE 30 kts, falling and/or blowing snow with visibility LTE 1/4 mile/0400 meters)	As potential warrants	Imposes significant risk to personnel movement	17 OWS
Sandstorm	As potential warrants	Disrupts personnel movement and aviation operations	17 OWS
Lightning within 5 NM	30	Immediate threat to exposed personnel	17 OWS



Table A2.4. Weather Warnings for COBs During Major Exercises and Contingencies

FORECAST/OBSERVED WEATHER WARNING CRITERIA			
PHENOMENA	DLT (in minutes)	Mission Impacts	ISSUED BY
Tornado	90	Immediate threat of catastrophic damage to personnel and property	17 OWS
Severe Thunderstorm (Damaging Winds GTE 45 knots and/or Hail GTE 1/2 in)	120	Immediate threat to exposed personnel, facilities & equipment	17 OWS
Moderate Thunderstorm (Strong Wind GTE 35 kts LT 50 kts and/or Hail GET 1/4 in. LT 3/4 in.)	120	Increased risk to exposed personnel, property, acft & vehicles.	17 OWS
Damaging Winds GTE 45 knots	120	Immediate threat to exposed personnel, facilities & equipment	17 OWS
Strong Winds GTE 35 knots	90	Increased risk to exposed personnel, property, acft & vehicles.	17 OWS
Freezing Precipitation	90	Range of impacts dependent on type & intensity	17 OWS
Heavy Rain/Snow Accumulation GTE 2" in 12 hours	90	Disrupts personnel movement or flight line activities	17 OWS
Blizzard Conditions (Duration GTE 3 hrs, wind or gusts GTE 30 kts, falling and/or blowing snow with visibility LTE ¼ mile/0400 meters)	90	Imposes significant risk to personnel movement	17 OWS
Sandstorm	90	Disrupts personnel movement and aviation operations	17 OWS
Lightning within 5 NM	Observed	Immediate threat to exposed personnel	17 OWS

**Table A2.5. USFK Area Weather Advisory (AWA) Criteria**

<b>607 WS FORECAST/OBSERVED AREA WEATHER ADVISORY CRITERIA</b>	
<b>PHENOMENA</b>	<b>DLT</b>
Tornadic Activity	30 Minutes
Severe Thunderstorms (Damaging Winds GTE 45kts or Hail GTE ½ inch or both)	2 Hours
Moderate Thunderstorms (Strong Winds GTE 30kts and LT 45kts or Hail GTE ¼ inch and LT ½ inch or both)	2 Hours
Lightning	30 Minutes
Damaging Winds GTE 45kts	2 Hours
Strong Winds GTE 30kts and LT 45kts	2 Hours
Heavy Rain $\geq 2''$ in 12 hours	4 Hours
Heavy Rain $\geq 5''$ in 24 hours	4 Hours
Heavy Snow $\geq 2''$ in 12 hours	2 Hours
Freezing Precipitation	2 Hours
Hard Freeze (Surface Temp $<0^{\circ}\text{F}/-18^{\circ}\text{C}$ )	6 Hours
Surface Wind Chill Temp $< -20^{\circ}\text{F}/-29^{\circ}\text{C}$	6 Hours

## Attachment 3

## CFACC MISSION WEATHER THRESHOLDS

Table A3.1. Weather thresholds for Armistice, exercises, and contingency missions

Parameter	Significant Impact - Red	Marginal Impact - Amber	No Impact - Green
Close Air Support (CAS)	CIG < 3000 ft VIS < 3 nm Thunderstorms > 1/2 fcst period Solid cloud decks 5000-25000 ft	CIG 3000 -10000 ft VIS 3 - 5 nm Thunderstorms < 1/2 fcst period Multiple cloud decks 5000-25000 ft	CIG > 10000 ft VIS > 5 nm No Thunderstorms CLR - SCT above 10000 ft
Offensive Counter Air (OCA) Interdiction (INT) X-INT	Solid cloud decks 10000 - 25000 ft VIS < 3 nm Thunderstorms > 1/2 fcst period	CIG < 10000 ft VIS 3 - 5 nm Thunderstorms < 1/2 fcst period	CIG > 10000 ft VIS > 5 nm No Thunderstorms
ISR / Recce (visible imagery)  [When impact is amber or red, recce assets can switch to radar collection methods]	Take off and Landing: CIG < 100 ft  Otherwise, for Ops Area OVC below 10000 ft	CIG ≤ 20000 ft	CLR - SCT cloud cover CIG > 20000 ft
Defensive Counter Air (DCA)  [Shown are take-off and landing thresholds. DCA over target area is seldom red]	Ops Area: Thunderstorms > 1/2 fcst period Solid Cloud decks 10000 thru 30000  Take off and Landing: CIG < 300 ft VIS < 1 nm Thunderstorms > 1/2 fcst period	Ops Area: Thunderstorms < 1/2 fcst period Solid Cloud decks 10000thru 20000 ft  Take off and Landing: CIG 300 - 3000 ft VIS 1 - 3 nm Thunderstorms < 1/2 fcst period	Ops Area: Multiple cloud decks at any location  Take off and Landing: CIG > 3000 ft VIS > 3 nm No Thunderstorms

Combat Search and Rescue (CSAR)	Day CIG < 500 ft VIS < 1 nm Night CIG < 1000 ft VIS < 2nm	CIG 1000 - 1500 ft VIS 2 - 3 nm	CIG >1500 ft VIS >□3 nm
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**Table A3.2. Weather thresholds for off-peninsula and miscellaneous missions**

Parameter	Significant Impact - Red	Marginal Impact - Amber	No Impact - Green
Maritime/ Carrier Assets	CIG < 500 ft VIS < 1 nm Wind > 40 kts Wave Height > 15 ft	500 ft < CIG < 3000 ft 1 nm < VIS < 5 nm  Wave heights 12-15 ft Sea temps < 60 F	CIG > 3000 ft VIS > 5 nm  Wave heights < 10 ft Sea temps > 60 °F
Airlift	CIG < 200 ft VIS < 1/2 nm  SVR TSTM (3/4" hail, wind > 50 kts, or FC) SVR ICING SVR TURBULENCE Takeoff Only X-WIND > 25 kts	200 ft < CIG < 700 ft 1/2 nm < VIS < 2 nm  SCT - FEW (25 - 75% aerial) TSTM coverage FCST or OBS MDT Icing OBS moderate turbulence Takeoff Only X-WIND 20-25 kts WIND 35 - 49 kts	CIG ≥ 700 ft VIS ≥ 2 nm  Isolated (<25% aerial) TSTM coverage
Air Refueling (track area)	VIS < 1 nm TSTMs w/in 10 nm (departure); ANY enroute SVR TSTM (3/4" hail, wind > 50 kts, or FC) SVR ICING (forecast or observed) SVR TURBULENCE (forecast or observed) Takeoff Only X-WIND > 25 kts	1 nm < VIS < 3 nm TSTMs w/in 10 nm MDT icing MDT turbulence Takeoff Only X-WIND 15 - 25 kts WIND 35 - 49 kts	VIS > 3 nm Isolated (<25% aerial) TSTM coverage < MDT icing < MDT turbulence